S-100.543

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## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants:

Donna L. Robinson

Docket No.: S-100,543

Serial No.:

Examiner:

Filed

September 04, 2003

Art Unit:

For

IMPROVED METHODS FOR SEQUENCING GC-RICH AND

**CCT REPEAT DNA TEMPLATES** 

Commissioner for Patents P. O. Box 1450 Alexandria, VA 22313-1450

## **PETITION UNDER 37 CFR 1.84(a)(2)**

Sir,

Pursuant to Rule 84(a)(2), Applicants hereby petition the Office to accept color drawings in the above-referenced patent application being filed concurrently herewith.

Three sets of color drawings and a black and white photocopy set are attached hereto.

The fee set forth in 37 CFR 1.17(h) is \$130.00.

CERTIFICATE OF MAILING/TRANSMISSION (37 CFR 1.8(a)) I hereby certify that this correspondence is, on the date shown below, being: **FACSIMILE** MAILING □ deposited with the United States Postal Service transmitted by facsimile to the Patent and with sufficient postage as Express Mali, Label No. Trademark Office EJ425247037US in an envelope addressed to the: Commissioner for Patents, P. O. Box 1450, Alexandria, VA 22313-1450 Signature September 04, 2003 Sharon Ruminer (type or print name of person certifying)

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Color drawings are necessary in this application for the following reasons. All of the drawings being submitted as part of this application are fluorogram traces generated by software specifically designed to render data from an automated DNA sequencing instrument, specifically ABI Prism Sequencing Analysis Software version 5.0 (Applied Biosystems Inc., Foster City, CA). These fluorogram traces present four different color waveforms corresponding to the four different nucleotide bases in DNA, each of which is labeled with a different color fluorescent dye, enabling the sequencing instrument to differentiate between them. The four waveforms are presented in overlapping format, making it very difficult for one to distinguish the different waveforms in a black and white form.

In addition to the waveforms, the software output includes a bar graph representation of a statistical parameter designed to assess the level of confidence attached to each nucleotide base in the sequence. These bar graphs are also rendered in the same four colors, each representing a different nucleotide base. Although a black and white rendering of these bar graphs enables one to see the relative level of confidence attached to a particular nucleotide base, it does not enable one to get a picture of the overall relative nucleotide base composition of the entire DNA being sequenced. Only a color rendering provides this additional and important level of information.

The specification of the application includes the language required under 37 CFR 1.84(a)(2)(iv).

Date: September 04, 2003

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Respectfully submitted,

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